

WHAT IS CLAIMED IS:

1. A torque detector comprising:

a monolithic tubular housing for supporting a rotating shaft, including an opening at one end in a longitudinal direction;

a sensor holding hole for holding a sensor part detecting a rotating torque exerted on the rotating shaft, which is provided inside the housing and communicates with the opening;

a board chamber for accommodating a circuit board outputting a signal corresponding to the detected rotating torque, which is provided inside the housing and communicates with the opening;

a partition wall between the sensor holding hole and the board chamber; and

a lead hole passing through the partition wall, into which a lead connecting the sensor part to the circuit board is inserted and which communicates with the opening,

wherein the housing is formed by drawing a sheet material in the longitudinal direction.

2. A torque detector according to claim 1, wherein the housing is made of steel.

3. A torque detector according to claim 1, wherein the

housing includes a flange formed around the opening.

4. A method of manufacturing a housing of a torque detector which includes a sensor holding hole for holding
5 a sensor part detecting a rotating torque exerted on the rotating shaft, a board chamber for accommodating a circuit board outputting a signal corresponding to the detected rotating torque, a partition wall between the sensor holding hole and the board chamber, and a lead
10 hole passing through the partition wall, into which a lead connecting the sensor part to the circuit board is inserted, the method comprising the steps of:

providing a sheet material as a material of the housing, a female mold for forming an outer surface shape
15 of the housing and a male mold for forming an inner surface shape of the housing;

arranging the sheet material between the female and male molds; and

20 pushing the male mold into the female mold so as to forming the sheet material into the housing so that the sensor holding hole, the board chamber and the lead hole respectively extend in the pushing direction and communicate with each other.